THE GENESEE FARMER.

VOL. VIII. ROCHESTER, N. Y. JUNE 16, 1838. NO. 24.

PUBLISHED BY LUTHER TUCKER,

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2,00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

☞ THE MONTHLY GENESEE FARMER is made up of selections from this paper, and published on the first of each month, forming, with the Title-page and index, an annual volume of 200 pages, at the low price of FIFTY CENTS a year, *payable always in advance.*—Eleven copies for Five Dollars.

THE GENESEE FARMER.

SATURDAY, JUNE 16, 1838.

ESSAYS ON SHEEP.

We would particularly invite the attention of the readers of the Farmer to the valuable papers which have been furnished by 'L. A. M.' on the sheep, their best methods of growing, protection, &c. Our correspondent is precisely the man to render such a subject interesting, since he has participated in what he describes, and his remarks are but the history of his ample experience. On the opinions of such men as 'South Hill,' 'L. A. M.' and 'G.' farmers who require information on the treatment of Sheep may well rely; and we think those who have requested information on topics connected with the breeding and management of the sheep; the best kinds of wool, buildings for their use, the degree of protection they require and its benefits, will find in the papers we have published from these sources the intelligence needed.

Sheep have become in value and productiveness one of the most important animals in the United States; and though occasional fluctuations in the prices of wool may take place, and thus the prices of the animal be raised or depressed, yet these can be but temporary, since the law of demand arises from causes which can never cease. Independent of the absolute necessity existing for wool, the consumption of mutton in this country is greatly on the increase, and promises here as in England to take the place in a great measure, as an article of food, of beef and pork; thus giving a new importance to the sheep, and a new source of demand and value.

Heretofore the growing of sheep has been considered a matter of mere secondary interest with most farmers, but the certainty that the profits must in a great measure depend on the care bestowed upon them, should stimulate all those who are engaged in their growth as an article of profit, or who have a proper regard for the comfort of animals, to provide suitable protection, as well as an abundant supply of food. The remarks of L. A. M. on this topic are admirable, fortified as they are by the most conclusive facts, drawn from actual experience. No one who has ever raised this valuable animal to any extent, will be disposed to dissent from the conclusions of our correspondent. To their general correctness, we can add our own testimony. For the care we have given our flock of sheep we have been amply repaid, both in the health and good order of the flock, and the weight and quality of the wool. Negligence here, speedily finds its own punishment. Exposure, want of proper food, want of water and salt, neglect of incipient disease, or want of proper division of the flock, are sure to be visited with prompt correction. Feeble and emaciated sheep; heavy losses among the old ones; and few lambs, and those reared with great difficulty, are the certain results of low keeping and unnecessary exposure.

So important to the great agricultural and commercial and manfacturing interests of the country, do we consider the growth and quality of sheep and wool, that we are always pleased to receive communications on a subject of such practical utility; and we hope our correspondents named above, as well as others who have interesting facts and experience to communicate, will still wield their pens in exposition of this interest, as we shall be happy to make the columns of the Genesee Farmer the vehicle of spreading such papers before the public.

Cob Meal and Cob Mills.

A friend and correspondent in Ohio has requested some information as to the value of cobs ground with the corn, and the cheapest and best mill for grinding them together.

That a very great saving is effected in feeding animals by grinding their food does not admit of a doubt; and the explanation of the fact, as given by Raspail and Dutrochet, is perfectly satisfactory. It is also certain that when nutritive matter is properly divided and incorporated with some substance suitable for the action and distention of the stomach, that a much less quantity will suffice, and the animal be in equally good condition.

It is on this principle that the English custom of substituting cut straw for hay in feeding with grain, a saving of one half of the expense being made in feeding with cut straw and ground grain, over feeding with hay and unground grain, according to the old mode. Neither the straw, or the cob, contain any great amount of nutriment in themselves, but they assist the digestive functions, and render the accompanying nutriment more available. The cob however has much the advantage of straw in every respect; and experience shows that those lose much who waste this important part of the corn crop.

Some interesting experiments have been recorded in the N. E. Farmer on the subject of fattening animals on corn and cob meal. The Rev. Mr. Perley in describing his method of using the food says:—

"I have for several years practiced having my corn and cobs ground together; breaking the cobs fine by pounding, and grinding one peck of corn with a bushel of the cobs. Meal made of this composition, I scalded, and made about as thick as common hasty pudding; or mixed about one peck of the meal with about three pecks of boiled potatoes, thickened to the consistency of pudding. There were no hogs in the neighborhood grew so fast, or were fit to kill so soon in the autumn."

In the Massachusetts Agricultural Repository is a communication from Mr. Rice of Shrewsbury, in which he says:

"The very best provender I have ever used for fattening cattle, is corn and cobs, ground together. The reason I consider the cob useful is, it swells in the creature, and keeps him in good order; in no one instance since I have fed with this meal, have my cattle been out of order by being cloyed, or scouring; they are at all times regular; but when I formerly fed with clear Indian, or oats and Indian, these difficulties frequently occurred, and they would lose as much in two or three days, as they would gain in a week. The second year that I made use of this kind of provender, I thought I would try an experiment, by feeding one ox with corn and oats ground, the other with corn and cobs, having one yoke of oxen so equally matched that no one who viewed them, appeared satisfied which was best. The cob is computed to make a little more than one third, therefore I mixed the other with one third oats which was my former mode. I gave each ox an equal quantity at a time, except that the one which had corn and oats some days became dainty, and would not eat his allowance, while the one fed with cob meal kept on his regular course. When taken to market and slaughtered, the oxen weighed 28 hundred and a half; the one fed on corn and oats had 162 lbs. of tallow, and weighed about half a hundred more. The one fed on cob meal had 163 lbs. of tallow, and the butcher pronounced his meat half a dollar in the hundred better than that of the other."

In the third vol. of the Philadelphia Society for promoting Agriculture, is an excellent paper by Dr. Mease, in which the utility of grinding the cobs with the corn is clearly shown both from analogy and actual experiment. And we believe that wherever it has been tried, or wherever the means of grinding can be had, it has been approved, and will be found of great value.

So far as we are acquainted, cobs after being broken, are ground in the common millstones with the corn. The same machinery used for grinding Plaster of Paris or gypsum, has been found efficacious for grinding cob meal; the plaster cracker reducing the cob sufficiently for the action of the stones. Mr. Buckminster speaking of machinery for this purpose says,—"for making cob meal we placed in our mill a pair of large stones, cut the eye of the runner 12 inches at top, and 14 or 15 inches at bottom, and bosomed it out large, as we term it. In this manner it answers every purpose for grinding and cracking corn in the ear."

The cast iron bark mill has been used for cracking cobs to some extent, and where a mill is convenient to grind the cobs and corn after cracking, would answer a good purpose; and we can see no reason why one constructed on the same principle, and like those worked by a horse or water power, might not be constructed to reduce the cobs and corn sufficiently fine to answer instead of the ordinary process of grinding. It must be remembered, however, that the goodness of cob meal must always in a great measure be depending on its fineness. Where it is an object to provide a mill of this kind, any farmer who has a horse power threshing machine, may with little expense procure ordinary millstones, and by attaching a cracker as for a plaster mill, or arranging the stones themselves as recommended by Mr. Buckminster, have a mill not only useful for grinding cobs but all the grain he intends for feeding. As the power required would be lessened, as the velocity was decreased, two horses would run a pair of millstones it is believed with as much ease, as four do the larger threshing machines.

'A proposition to facilitate Agricultural Improvement.'

Under this title, the last No. of the Cultivator contains a communication from Solon Robinson, Esqr. of Indiana, on the importance and advantages of a national, or *American Society of Agriculture.* The object of the society shall be to collect and disseminate useful intelligence; to form a bond of union, and a means of communication between agriculturists of different parts of the country; and by enlisting the talents, pens, and time, of men of the first character and standing in the country, in the cause of agriculture, render it a fashionable occupation, and thus lessen the number of foolish young men who crowd the professions, and think it an honor to live by their wit (or by the want of it,) rather than engage in the useful, and therefore most honorable occupation of cultivators of the soil. In proposing such an association he names for the first President, H. L. Ellsworth of the patent office, Washington, whose valuable remarks on the promotion of agriculture we quoted not long since in the Farmer.

The organization of such a Society, if its objects could be carried into effect, we doubt not would be most salutary. The mind of the nation requires to be enlisted in the cause, and perhaps such a society would do much towards so desirable a result. The patent office offers a great variety of models of implements useful to agriculture, and intended to facilitate its operations, and perhaps Washington, if our public men could feel the truth that the exchange of seeds and the dissemination of valuable plants would be of more importance to their constituents than the long speeches about nothing they seem to think themselves sent to Washington to deliver, would be as favorable a situation as any for such an institution.

We would venture to suggest, however, whether the city of New-York would not be a more eligible place, on the whole, than Washington; its facilities of communication with all parts of the country and with Europe, would give a greater currency to whatever new or useful might be the result of such an association, than if fixed at any other point. Besides there is in that city, already organized, a society (The American Institute) embracing most of the objects contemplated by Mr. Robinson, holding an annual fair, where gentlemen connected with agriculture and manufactures assemble from all parts of

the country; having a hall containing a vast number of agricultural, mechanical and manufacturing implements; and with slight modifications we should think such a Society might perform all that is expected by Mr. Robinson from the one proposed by him. It has in addition, a Journal most ably conducted, published monthly, and at the present time giving papers of great value on all the subjects embraced by the association. Such a Journal, enlarged if necessary, would form a suitable medium of communication with the country, and might become to agriculture and manufactures, what Silliman's is to the Sciences and Arts.

We are not however strenuous as to the form such a proposition may take, or the place where such a society may be located. Efficiency, and a concentration of public feeling on the great question of agriculture, is all that can be required; and any method that holds out a reasonable prospect of obtaining these great ends, shall receive our cordial support.

Meteorology---Snow Storm of May 25th.

It is very rarely that a more favorable opportunity offers for witnessing the formation and first progress of a tornado or thunder gust, than occurred in this place (Otisco) on the afternoon of May 23d. The wind during the preceding night and forenoon had blown steadily, but not strongly, from the south; and slight sprinklings of rain had fallen in the same time. The thermometer at 9 A. M. was at 51°, at 2 o'clock it stood at 71°, wind still fresh in the south. It may be remarked here, that the remarkable division of the elevated land of Western New-York into parallel depressions and elevations of great regularity, and opening both to the south and the north, must have a decided influence on the currents of air, in deflecting them from any course not agreeing with the direction of these elevations or depressions of the surface. The range between the Otisco and Skeneateles vallies, though not more than four miles in width, is elevated but little less than one thousand feet above the former; and that between the Otisco and the Onondaga valley, though of greater width, is in its highest part not much if any inferior in elevation. This configuration of the district, by enabling the observer to command a view of several of these parallel elevations and depressions of surface, gives a fine opportunity for observing phenomena of this nature, especially as the view to the south or the north, from some positions is almost unlimited.

At two o'clock, the southern current of air had not been checked; the clouds floated rapidly to the north, and then no indications of an electrical state of the atmosphere or clouds, could be discerned. At a little after 2, our attention was arrested by a sudden accumulation of clouds in the southwest, and it was seen at once that the masses of vapor which had been drifting to the north, were now hurrying in a direction directly opposite. The place of meeting of the two currents of air was distinctly visible, not only from the different movement of the clouds, but from the dense masses of vapor which the northern current seemed pushing before it. There was clearly a gyratory movement of the clouds on the line of meeting, and the forward motion of the mass was to the northeast. At the moment the northern current was driving the vapor with astonishing swiftness *up* the valley of the Skaneateles, the current of air from the south had not been checked over the Otisco, and the masses of clouds drifted as rapidly *down* that, as in a contrary direction in the former. Occasionally, as the cloud advanced to the northeast, masses of the vapor pushed over the elevated land of Spafford, between the two lakes, would be taken by the southern current, carried a mile or two to the north, and then thrown into the current rushing from the north. The line between the two currents was accurately defined, and the clouds rushed by each other in opposite directions with great velocity.

A loud roaring marked its advance, and while at the distance of one mile to the north from the center of the cloud, a violent rush of wind from the northwest marked the passage of the gale, at the same distance to the south the current was from the southwest. Immediately after the gale was over, the current of air in the whole district was from the northwest, which direction was maintained. There were no signs of electricity in the cloud until it was passing the valley of the Otisco; it was then accompanied with lightning and thunder, and these continued as it passed off to the east. Little or no damage was done, except in prostration of forest trees in the line of the gale. The rush of the wind was unattended with rain; but both rain and hail, the latter thick and small, immediately followed its passage. Every one must have noticed that thunder never occurs in a cloud, unless that peculiar form of cloud or vapor termed *cirri* rises from the mass, and stretches away usually in advance of the main cloud. Is not this thin streaming vapor, and the great height to which it generally rises, caused by the gyratory movement more or less present in thunder gusts, the upward current carrying the lighter particles of vapor to the greatest height? and as currents of vapor of different densities are known to be good conductors of electricity, may not these streams of vapor stretching off into space, serve as conductors to accumulate that fluid in what has been termed an immense Leyden jar, the electrified cloud.

The instant the current of air changed to the northwest, the thermometer fell rapidly, and at 3 o'clock was at 50°, falling 21° in about half an hour. On the 23d, the thermometer was, at 2 o'clock, 56°, on the 24th at 51°, and on the 25th at 36°, at the same hour. On this day, Friday 25th, occurred a severe snow storm over the greater part of the elevated range south of the Seneca and Oneida valley; the snow on the most elevated places lying at sundown to the depth of two or three inches, and the whole estimated to have fallen in depth at from six to eight inches. Ten or fifteen miles to the north of the elevated lands no snow fell, but its place was occupied by a very heavy rain. The sight was a singular one, to see the fruit trees white with blossoms bending under the weight of snow which covered them.* We may add here as a singular coincidence at least, that on the same day in which the above gale occurred in Onondaga but at a later hour, Baltimore was visited with a hurricane from the same quarter, and which like the former passed over to the North of East. The Baltimore gale of the two must have been much the most violent, unroofing and blowing down buildings, chimneys &c. W. G.

Otisco, May, 1838.

* At noon on the 26th, the eastern slope of the elevated part of the Poplar Ridge, Cayuga, was white with snow; and it had not wholly disappeared on the high lands farther east, at sundown on the 27th. The gyratory movement of the clouds in the tornado, it will be seen corresponds with the theory of Mr. Redfield, given in a former volume of the farmer.

THE CURCULIO.

Few of the insect depredators on fruits occasion so much injury and vexation to the cultivator as the Curculio. Its attacks are mostly confined to the smooth skinned and delicate varieties, such as plums, apricots, and cherries, and not unfrequently they effect a total destruction of the crop. In Western New-York we have not as yet suffered as severely as in the New England states, and the new settlements in the western states find their fruit entirely exempt from this pest. The evil is however increasing, and every project which promises to free our fruit trees from this insect will be hailed with pleasure. The egg of the Curculios is deposited in the fruit, becomes a worm, falls to the earth, remains through the winter, and in the spring at the proper season comes forth a perfect insect with wings, and repeats the same course of depredation.

In a late number of the New England Farmer, Mr. Kenrick of Nonantum, a gentleman of great experience in Horticulture, says:

"Dr. Burnett informed me a few days since, that he had a fine tree of Prince's Imperial Gage plum. This variety though naturally one of the most valuable and productive of all plums, yet never would produce a crop of fruit on his ground on account of the abundance of the Curculios, but by adopting the following expedient, a most bountiful crop was produced the last season.

Early in the spring or as soon as the tree was in bloom, a hencoop containing an early brood of chickens and hen, was placed beneath the tree. After the curculios had arisen from the earth, and before they were prepared to ascend the tree, every one of them, as it appears, was devoured by the brood; and owing to this circumstance, and to no other cause, the tree ripened and matured a most extraordinary crop of fruit."

Facts in the Culture of Fruit Trees.

It is generally supposed that when the roots of fruit trees become frozen, when out of the ground, they are completely killed, but experiments show that this is not the case. We have found that frozen roots, buried, before thawing, in the earth, become so gradually thawed as in general to suffer but little injury. Peach, plum, apple, apricot trees and grape vines have been effectually preserved by this precaution, but the remedy must be applied before the roots become thawed or all is lost.

—

"*The Peach*, in North America, Coxe says, is subject to a malady which no remedy can cure nor cultivation avert. This is a worm which destroys the roots and trunk of the tree. The only paliative is fresh soil."—*Loudon.*

The peach worm, it is true, is considered as a formidable enemy to the peach tree, but if attacked when the trees are small, little is to be feared from it. Instead of destroying the *roots and the trunk*, it only attacks that portion of the trunk, at or a little below the surface of the ground, and merely confines itself to *the bark*. If it eats a circle round the trees, it occasions their destruction, otherwise they may live for years and flourish. By examining the trees two or three times a year, following every worm-hole to its termination, (which is easily done through the bark,) and destroying the occupant, peach trees may be effectually preserved.

—

Now that hot and dry weather is approaching, newly transplanted fruit trees will need protection from the effects of drouth. The best way of preventing injury from this cause, is to keep the surface of the earth about them constantly hoed and mellow, which much contributes to the retention of the moisture beneath.

—

Lindley, in his Guide to the Orchard, speaking of the Sweeny Nonpareil, a large English variety of the apple, says, "The tree is an abundant bearer, and the fruit sometimes grows to a large size; the largest it ever produced was in 1818, measuring eleven inches and a quarter in circumference, and weighing *nine onnces and a quarter*. Twenty of this fruit, exhibited at the Horticultural Society in 1820, weighed seven pounds thirteen ounces avoirdupois." These would appear rather insignificant beside our largest apples, which sometimes weigh nearly a pound and a half.

On the other hand, it appears that some of the largest clingstone *peaches*, sometimes measured *fourteen inches in circumference*, in England, while in this country they very rarely exceed nine or ten inches. Would the mode of culture adopted in England, (training against a wall,) increase the size here beyond that which is there obtained?

J. J. T.

Substitute for Spaying.

In a late number of the Farmer we recommended, where it was desirable to keep a cow in milk for years without the trouble of breeding, that she should be spayed some two or three weeks after calving; experiments in France and in this country having proved that such a course would be successful. In the Kentucky Franklin Farmer of Jan. 13, a 'Woodford Farmer' gives a different mode of producing the same effect, altogether preferable, should his suggestion in the case of the cow, prove as successful as in that of sows. He says:

"A new mode has been adopted, (I do not know when or by whom,) as a substitute for spaying, which is of great importance to the agriculturist. From a number of contradictory reports, and from a want of the knowledge of operating, the system met with few advocates, and for the best reason—because the instructions were to use shot, which did not answer the purpose. Instead of shot, a bullet is now used, which fully and completely answers

the desired object. I have the best assurance of its efficacy, and with pleasure make the communication to the world.

Mr. Hancock Davis, my near neighbor, has tried the experiment, and the result was complete and satisfactory; so much so, that he has operated on all his young sows, to the number of fifty; they are all healthy, thriving and fat, and as barren as if they had been spayed, showing no inclination for the boar. He performs the operation by hanging the sow up by the hind legs, in the manner of spaying, and through a reed or any other tube, introduced two or three times into the *vagina*, a small rifle bullet is deposited. Any farmer can perform this simple operation with ease and perfect safety, without hunting the neighborhood for a person skillful in the art of spaying. * * * My mode of operation on a cow, and which I think would be successful, is this:—Tie your cow or heifer by the head and horns in a narrow stall, and if disposed to kick, tie her hind legs together; have a smooth stick or probe prepared, with a cavity in the end sufficiently deep to cover half the bullet, in which you will place it; introduce the probe four or five inches, elevate and draw it out, and the bullet will be left where it was designed. It may require a larger bullet for a cow or heifer, than the size used for *bulleting* sows."

BASS MATTING.

At any time when basswood bark will peel freely, it may be removed and prepared for matting and strings. Every farmer would find it useful for various purposes in tieing, but it is especially useful to all cultivators of plants and trees, in fastening young trees to stakes, tieing up straggling plants and shrubs, for ligatures in budding, &c. To prepare it properly, strip off the fresh bark, cut it up in lengths of about ten feet, and immerse it immediately in water, taking care that every part is covered by laying large stones upon it. In four or five weeks, the successive layers which form the inner bark will be completely separated and will fall apart when lifted from the water. They are then readily stripped from the outer or rough bark, and laid aside to dry for use. This is better and much easier than to shave the rough bark from the inner portion before soaking. When intended for weaving into mats, it is cut into narrow strips as soon as taken from the tree, as it is difficult to separate it into shreds of uniform width afterwards. If the bark is suffered to become dry after taken from the tree, no length of soaking, nor even boiling, can separate the laminm. It should in no case be suffered to remain too long in water, for as soon as the bark separates, it commences rotting and in a short time would be too weak for useful purposes. If this precaution is observed, we may obtain the material in a much superior state to any we get from Europe.

J. J. T.

Dont Blame your Seedsman.

Few things are more common than for farmers to purchase seeds at the shops, either Shaker or imported, put them into the ground in the garden or the field, and because they do not all vegetate, the seeds are denounced as worthless and the seedsman is compelled to bear the blame of the transaction. Now we venture to assert that nine times out of ten, when the seed has been purchased of a well established seedsman, the failure should be charged upon the buyer instead of the seller.

How many packages of the yellow locust seed have been put into the ground without previous preparation, and when not one in a hundred has grown, the seed has been called bad, and the seller a cheat. Now if the buyer had turned boiling water on his seed till they were swelled, perhaps not one in a hundred would have failed, and a fine nursery of trees, and a handsome profit, would have been the result.

How has the purchaser of Mangold Wurtzel been disappointed in the germination of the seed, and fancied that he had been imposed upon, perhaps discouraged from any farther attempt at growing this valuable root, when, had he let the seed soaked in water a little warm for twenty-four hours, nearly every one would have grown. The same remark will apply to the common beet, and various other seeds that frequently fail of germinating.

A farmer buys a quantity of Ruta Baga seed and sows it on stiff clay. The crop is of course a failure, but instead of placing the blame where it should be, to his inattention to the fact that such soils are entirely unsuitable for turneps, or any tap rooted plant, he condemns the seed as impure or imperfect, when, if sown on the proper soil, a deep sandy loam, the produce would have been first rate.

We have given these instances to show that when a man purchases seeds, he should know how to sow them, and where to sow them, if he would be saved from disappointment. Scarcely any two kinds of seeds will succeed equally well when they receive the same treatment, are planted in the same kinds of soil, or to the same depth. Ignorance, or inattention, here frequently end in disappointment, and the vender of valuable seeds frequently receives blame, when his efforts to accommodate the public deserve the highest praise.

PROGRESS OF AGRICULTURE.

When the bill providing for a continuation of the Agricultural Survey of Massachusetts by the Rev. H. Colman, came up before the legislature of that state a few weeks since, a dead set was made upon it by a few individuals, who included in their denunciations, not only the survey, but all legislative measures for the promotion of Agriculture, all societies, ploughing matches, fairs, &c. They maintained that it was absurd to stimulate men to attend to their own interest—that legislation was improper—that Agricultural and Geological surveys are expensive—in short they were wholly on the 'let us alone system,' a system which will do very well to take about, but which in practice is found frequently to produce results any thing but favorable.

Their remarks called out a most triumphant refutation from Mr. Prince of Roxbury, who has from the first been connected with the most effective and prosperous Agricultural Society in the country, that of Massachusetts; and who for some 20 years has been Secretary of that State Institution. Mr. Prince showed most conclusively that the first introduction into the state, of all the improved implements of husbandry, those that have entirely superseded the clumsy contrivances of the earlier farmers, were owing to Agricultural associations, and exhibitions.

The first ploughing match in America took place at Brighton in 1817, under the patronage of the Massachusetts Agricultural Society, and then was introduced there for the first time, Wood's patent cast iron plough, made by Freeborn, a plough which in its various modifications has superseded all others, and so far as ploughing is concerned, (and all will admit that this lies at the very basis of husbandry) has effected a complete revolution in the ease and facility of the operation. At the Brighton show in 1836 there were twenty-two ploughs in the competition, all of which were of iron. He showed that such had been the fact with regard to drills, cultivators, machines for sowing seeds broad cast, hay and manure forks, and numberless other implements of great value to the farmer. They were first introduced by such societies; they were tested, and their operation shown at the shows and exhibitions, and they were thus brought to the notice of thousands of farmers at once, many of whom might otherwise not have heard of them for years.

The Merino, and the Durham cattle, were introduced many years since by the President of this Society; and it is mainly through the influence of this and similar associations, that the beautiful McKay, Berkshire, China, and Byfield pigs, have in that state mostly superseded the long nosed, impossible-to-fat swine that formerly devoured the corn of the bay state. This improvement in pigs alone was many years since, by one of the most extensive dealers in pork in Massachusetts, estimated at more than a hundred thousand dollars.

It gives us pleasure to state that the bill to continue the appropriations of the state for such purposes was sustained by a vote of more tham twenty to one. The course of the Massachusetts legislature is one honorable to their patriotism, and a proof of their intelligence. Their bounty on wheat, will cause the production of a handsome crop, we have not a doubt; we only regret that such quantities of wheat have been sent to eastern farmers, under names to which it has not the slightest pretension. The 'staff of life' should not be subjected to such petty speculations and deceptions.

USE OF LIME.

Prof. Hitchcock, in his late valuable report on the Agricultural and Economical Geology of Massachusetts, has a well written essay on the use and operation of lime and marl; and as we cannot lay it before our readers, we shall submit to them a few of the practical inferences which may fairly be drawn from the principles apparently established by him:

1. That lime in itself does not constitute the food of plants; and therefore cannot be said, as in the application of common manure, to be in itself a source of fertility.

2. That lime acts on the vegetable matter or humus of the soil, and by a process akin to *saponification*, or the conversion of oils and fat into soap by the action of an alkali, converts the soluble vegetable or animal matter in the soil into a nalt easily soluble in water, and fit for the food and nourishment of plants.

3. That the quantity of lime to be applied to land must be determined by the state of the soil; and that where it produces plants indicative of free acids, enough lime should be added to neutralize all these and promote a better vegetation. Sorrel and pine are indications of the presence of uncombined acids.

4. That where earthy salts are present, lime should be added to convert them into salts of lime, such as phosphates and carbonates. The more thoroughly impregnated with animal and vegetable matter a soil is, the greater the quantity of such matter to be converted.

5. That enough lime should be added to a soil to change the insoluble *humus* and vegetable fibre in a soil into that which is soluble. Hence the richer a soil is, the more lime it will bear.

6. "That there is no danger of adding to any soil too much marl or lime, provided a sufficient quantity of manure be also added. Ignorance of this principle it is apprehended has been the source of most of the failures that have occurred in the use of lime upon our soils."

7. That lime will not benefit land worn out, or deprived of its humus by constant cropping. There must be something for the lime to work upon or no fertility will be induced by its application. Lime may indeed act mechanically upon soils, so as to render them more friable and fit for vegetation; but unless the principle of fertility is already in the soil, vegetation will not be the result of such mechanical division.

8. That analysis of soils is beneficial by showing its constituents, and aiding in the determination of the proper measures to be pursued in promoting fertility. If considerable quantities of calcareous matter are present, it is scarcely possible the fertility should fail, if manure is added; and if analysis indicates abundance of vegetable or animal matter, lime may be applied without any fear of injurious results.

The Wheat Crop.

Reports from all the wheat-growing sections of our country, represent the wheat crop as promising a bountiful harvest. We make the following extract from a letter just received from a friend at Emmetsburg, Maryland; "I have been an accurate observer of the wheat crops for the last ten years, and can safely affirm, that from present appearances, that crop will be twenty-five per cent heavier than I have ever observed it in that period of time. The same remark is made by all I meet from every part of this wheat-growing region. There is not, however, so much sown as in many years."

HOOF-AIL.

The answer to the following question may have an important bearing on the inquiry in relation to the cause of the Hoof-Ail; and we shall be glad to learn whether, among the multitude of cases which have occurred the past winter, any have happened among cattle that were comfortably housed and regularly and well fed.

Will you please to inform me whether cattle have had the *Hoof-Ail* the past winter in any instance, where they have been properly stabled. If you are not fully informed, will you please to solicit information on this point from your subscribers?

EDWARD WILBUR.

The Geological Reports.

Professor E. Emmons, of the 2d Geological District, says:

"I commenced my labors in the field early in May, in the county of St. Lawrence,* where they were pursued till the first of August. I then passed over into Essex county, where I spent the remainder of the summer and autumn."

He gives descriptions of two minerals supposed to be new.

The Report is embellished by numerous figures, and several are illustrative of the *igneous origin* of primitive limestone. These are highly curious, and exhibit great industry and observation. It would be foreign to our purpose however, to give his arguments in detail; and shall content ourselves with a brief extract. After stating that foliated plumbago occurs in all the primitive limestones, he says:

"At the first thought the fact may not appear in point; but when it is compared with a result which always occurs in furnaces when in good action, it certainly becomes important. It is interesting to observe the abundance of foliated plumbago in the slags of furnaces and forges.—This substance is made when the furnace attains its maximum heat, and when it is in perfect operation, but never when the heat is below a certain standard."

Where soft limestone occurs the following suggestion may be of importance:

"It is desirable that some enterprising farmer should procure a quantity of limestone in a *ground* state, and make application of it to various crops. In the use of it there is no danger of applying an excessive quantity, as *one-third of the whole upper stratum of soil* might consist of carbonate of *lime* without injury to vegetation."

We do not subscribe however, to the doctrine advanced or insinuated in the Report, that the chief use of lime as a manure is to "enter directly into the vascular system" and form a part of the vegetable. This agency is only one among others. When reduced to an *impalpable* powder, it doubtless possesses in common with some other earths the property of absorbing moisture from the atmosphere; but its power to neutralize acid soils, and to combine with the fertilizing gases of putrescent manures, *storing them safely for future use*, ought never to be forgotten by the cultivator; and with these facts fresh in his memory, he will scarcely stop to inquire how soon his crops would consume all the alkaline earth of his fields, but apply more in liberal abundance.

We were gratified to find in the Report the following statement, founded on a most interesting experiment, although the kind of crop is not stated, and wheat and Indian corn would probably require earths in different proportions:

"The *most fertile soil formed artificially* by the mixture of different earths, yields on analysis,

Coarse silex,	25
Silica,	21
Alumina,	16
Carb. lime,	37

"Nothing of course is said of the quantity of *water*, or of *vegetable* and *animal* matter present in the soil, as the inquiry related solely to the *earths essential to fertility*."

In this soil we observe that *sand* or gravel constitutes one-fourth; and the silica and alumina forming *clay*, makes the quantity equal to the carb. *lime*, or more than one-third part of each; but as the last ingredient is annually diminished in the soil by new combinations into which the lime enters,† we may infer that the quantity when first mixed, was *greater*, and that the alumina under which it lay concealed, was *less* than the analysis has exhibited.

The 2d Geological District, as well as no inconsiderable part of the 1st District, appears to be rich in ORES; and this survey, as we anticipated, has awakened the enterprise of the country. Prof. E. says:

"The discoveries of deposits of IRON, *during the* last year, have been quite numerous, enough so to meet all the demands for the article, and furnish employment for thousands of individuals, and the consumption of all the wood which can be spared for this manufacture."

"The Hypersthene rock of Essex embraces the largest deposits of iron in the United States, so far as discoveries have yet been made. One bed in Moriah [underlays] a tract of land of between 30 and 40 acres—that is, with a spade the bed of ore may be reached any where within that extent of surface.——One solid body of ore on Lake Sandford, is probably 500 feet wide, and its extent north and south unknown.——No one of these beds of iron may be equal to those of Missouri, still, *put together*, there is a much greater quantity of it; and farther, more advantageously distributed, on account of a better supply of wood, than there possibly could be if all the beds constituted one or two mountains of ore."——

We learn from the Report that there are four veins in the immediate neighborhood of the Rossie LEAD mine, which intersect each other at various points, and occurring in the vicinity of each other they form a very remarkable mining region.

"These veins are found in gneiss, interlaminated with horn-blende. The gangue is carbonate of lime, coarse and crystaline, with druses of beautiful calcareous spar. The dip is nearly vertical, slightly inclining to the north. The width of the gangue is four feet. The whole depth to which the mine has been worked is 100 feet. At the depth of 40 feet, the average width of the vein of lead is 2½ feet; at 80 feet, 3 feet; and at 100 feet, 3½ feet—showing a gradual increase in width. It is to be understood that there is not a width of solid galena of 3, or even 2 feet; but the width at which the lead appears in the vein of spar, is as stated at the various depths. It is every where more or less intermixed with the gangue, even where it is the richest.——The quantity of lead manufactured since the first of January, 1837, amounts to 2,029,415 pounds."

"The opinion expressed last year, that COPPER would be added to the mineral wealth of St. Lawrence, has been in part realized. Two *new* veins have been discovered which have yielded a large supply of ore."

Our limits will only allow us to notice a few of the interesting facts detailed in this Report; and not unfrequently we have taken the liberty to condense the language, endeavoring carefully however, to preserve the sense. Under the head of *Serpentine*, which is employed in ornamental work, Prof. E. says:

"It is usually green, yellowish green, and sometimes reddish brown. Colors pale, and varying in intensity; the darker lying in a pale ground, imparts to the polished pieces an agreeable clouded appearance. It polishes easily and beautifully, which it retains as perfectly as marble, though the pale colors are liable, it is said, to fade. When made into mantle-pieces, it stands the fire better than the limestones, as it does not like them, burn out; neither is it apt to crack by heating, but grows harder by exposure to heat and air.——Generally it is difficult to obtain large slabs of serpentine, on account of the checks and fractures pervading it; but at many of the localities in St. Lawrence, the soundness of the rock is remarkable."

"*Verd antique.** At Pitcairn there is a fine locality of this beautiful marble. The colors are green and white, arranged in the usual forms of clouded marble. The serpentine has a bright green color, and belongs to the variety called *precious*. The calcareous spar is white or grayish white, and forms a handsome ground for the translucent serpentine. The quality of the rock is excellent, free from natural flaws and fissures. So sound is it that a mass rings like a piece of clinkstone. This variety of marble has always been esteemed in works of art. Though this locality is distant from navigation, still it might be introduced into the parlors of the rich for ornamental tables, to the exclusion of foreign articles. Polished specimens may be seen in the collection."

"*Primitive limestone.*—A handsome *green* variety which becomes *a beautiful blue* by exposure to the weather, occurs in Keene at Long Pond. Some of the more perfect varieties usually called calcareous spar, or Iceland spar, are limpid, *amethystine*, and *straw colored*.

Labradorite. "The varieties of color are extremely numerous, and frequently of surpassing beauty. The polished pieces form gems highly valued in jewellery, which certainly have this recommendation, that *they cannot be imitated*, a fact which can scarcely be stated of any other gem.——The breadth east and west of this Hypersthene formation [in which the Labradorite occurs] cannot be less than *thirty* miles, and in length it extends diagonally across the whole county from Port Kent to Minerva. As an ornamental article for tables, chimney pieces, &c. I consider it of the most value. It may be split into rectangular pieces of any size, and these may be sawn into slabs of the requisite thickness. It receives a polish superior to any of the American marbles, and its worth is five times at least greater."

Professor E. mentions the *sandstone* of Potsdam as among the natural sources of wealth.

"Its durability and evenness of grain and strata, fits it admirably for every kind of use to which stone is ever required. It bears a land transportation of 15 to 20 miles; and at these distances from the quarries it is considered as cheap a material for building as brick. As it regards beauty, there is no stone superior to it unless it is marble. As a *firestone* it is held in the highest repute. All the furnaces of St. Lawrence and Jefferson counties have their hearths of this sandstone."

He considers the sandstone of Essex as belonging to the same formation.

This rock appears to rest uniformly on the primary strata, like Prof. H. D. Rogers's Formation No. 1, "a compact white sandstone"; and which he considers identical with Eaton's *Calciferous Sandrock*. Prof. Emmons says "it passes into the calciferous sandrock," though in two other places he says it is always beneath it. Be this as it may, Prof. Vanuxem says, "the calciferous sandrock is very variable in its character and composition," varying so greatly as often to be wanting in one of its components; and that "in many parts of New-Jersey, Pennsylvania, Maryland, Virginia and North Carolina, it ranks among the limestone rocks, and makes excellent lime by burning." He always found it resting on the gneiss near the Mohawk river.

"*Soapstone* is well known in the vicinity where it occurs," says Prof. E. "but its value is not fully appreciated. It may be cut, sawn, or turned, easily, and converted into a great variety of useful articles, at a very moderate expense—good beds of it are invaluable. It possesses a remarkable degree of toughness, and is also very refractory in the fire. When sawn into slabs and varnished, a great variety of soft beautiful colors are brought out, without any further preparation. On exposure to heat, it hardens, and then it is susceptible of receiving a high polish. It occurs abundantly in Fowler and Edwards. The white variety is the most valuable on account of its forming with white sand, a white enamel, or an inferior variety of porcelain. Much of the so called Soapstone is *Rensselaerite*,* the grayish green colored stone used for inkstands is this mineral; its qualities are much the same as the common soapstone."

"The region in which the east branch of the Hudson river rises, it seems had never been explored previous to our visit; and it is not unreasonable to suppose this, for all our writers on Geography have uniformly underrated its height, have made incorrect statements in relation to the origin and course of the principal branches of the Hudson, and also in relation to the character of the whole mountain group in which they rise."

It appears that Mount Washington, the main summit of the White Mountains, N. H. only exceeds Mount Marcy in height by 767 feet. Prof. E. says that "large banks of snow remained on [this eminence] until the middle of July; and that we have reason to believe that ice is formed there every night during the summer."

Prof. E. thinks that the *thinness* of the vegetable mould in those northern counties, goes to prove their "comparative newness"; and that "it is geologically speaking, only a short period since the lower formations of the country were elevated above the ocean"—not so long as many parts of New England. We do not object to speculations of this kind when well fortified with FACTS; but stronger evidence than thinness of soil would be required to satisfy us that the upheaving of these mountains, is more recent than the tertiary or diluvial formations.

Butter from Four Cows.

Mr. Thomas Wright of Henrietta, in this county, informs us that he sold, from the produce of four cows the last season, 656 pounds of butter, besides supplying his family, consisting of seven persons, with milk, cream, and butter. The cows received no extra care or feed.

Beet Sugar in Michigan.

A letter from Michigan says:—"I am told that a company for the manufacture of Beet Sugar have established themselves on White Pigeon Prairie, with a capital of $300,000. Our Legislature have offered a bounty of two cents for every pound of dry beet sugar manufactured within this State."

---

* A misprint makes this county "2717 miles square"!
† Ruffin's Essay on Calcareous Manures.

* Verd antique is an *irregular mixture* of granular limestone and green serpentine.

* Named, we presume, in honor of the munificent patron of Geology, STEPHEN VAN RENSSELAER.

COMMUNICATIONS.

SHADE TREES.

Spring, if not the best, is certainly the pleasantest period for transplanting shade trees—at either time, a most agreeable occupation to the man of taste. Some one has remarked, that he who plants a tree, thereby makes posterity his debtor. This is true; and the extent which the present and future generations are indebted to the past, may be inferred from the fact that many of the large forests, and perhaps all the parks standing in the more densely populated portions of the old world, have been planted by the hand of man.

In our country, more attention has necessarily been bestowed on cutting away than replanting trees, but the work of extermination has been carried too far. The hardy pioneer of the American wilderness, thought little of making provision for future shade, when the sun could scarcely peer into his little "clearing" in the dense gloom of the primeval forest. He had too much shade already; it was round him, about him, and over him. But in sections where the soil has proved fertile, the little "clearing" of the first settler has already widened over hills and valleys, now covered with luxuriant crops, and on which flocks and herds have taken the place of beasts of prey. It is true there are few portions of our country, which from any given point, will not present enough—nay, more than enough trees to the eye; but they, too, generally are in remote positions—'wood lots' reserved for fuel, while the cultivated portions of the several farms are swept as bare of them, as if in each, the proprietors of the soil dreaded an Upas. We travel over hot and dusty roads, the sun beating fiercely down on our heads, not a leaf to intercept its scorching glare, while on either side the blackened stumps of the trees which *would* have sheltered us, testify against the unsparing ravages of the axe. This is for the profit of the thing! Trees shade the crops—they obstruct the plough, therefore, the man who has three times as much land as he can properly cultivate, cannot spare a trifling portion of it to add to the beauty of his possessions, and to increase his own, or if he cannot appreciate it, the comfort of his flocks and herds. The English evince more liberality and better taste. In a country where land bears a far higher value than in our own, trees stand in every hedge row, and cast their shade over every inclosure.

> "The stately homes of England,
> How beautiful they stand!
> Amidst their tall ancestral trees
> O'er all the pleasant land."

How different the scene here presented, from one which too often meets the eye in our own country. The "stately homes" of this opulent and haughty people we have not, and perhaps this is the part of the picture least to be coveted. Those frowning relics of arbitrary power and baronial pride, the ancient castles—and the modern 'seats' on which wealth which would buy kingdoms has been lavished, belong not to a free country. But the trees we might have had around our dwellings, more varied in their foliage and hues, than those of England—we had only to *spare* them. We might have had our neat *cottage houses* amid clumps of ancient trees, saved from the original forest, combining comfort with beauty and taste,—and this, too, at no greater expense than we have been at to prepare our present grounds, and erect our present dwellings. But instead of the neat cottage, with its vine covered porch, its shades and shrubberies, how much more usual it is to see the great over-grown, ill-constructed farm house, unfinished and unfurnished, partially unoccupied—not a tree, not a bush, not a blind, and scarcely a curtain, to exclude the sun, or mitigate the sweltering heat of an American August! But it is not my purpose here to write a disquisition on architecture.

Having committed an error, we should do the best in our power to repair it. We must plant a new generation in the place of the old monarchs of the forest which we have destroyed—placing them in those positions where they are required for shade, as shelters from bleak winds, or as beautiful and picturesque objects in the landscape. As to the varieties to be selected, much of course will depend upon taste,—though, as a general rule, the preference should be given, I think, to those indigenous to the section of country where they are to be planted. Many apparently can see no beauty in any varieties, excepting those procured from a great distance, and at a great expense. This is in wretched taste. Grounds filled with delicate exotics, none of them flourishing in their natural vigor in a climate unsuited to them, and many of them requiring protection in the winter, may do for the professed gardener, or him who has but a square rod or two of land in front of his city residence, but on grounds of any considerable extent, our indigenous forest trees are not surpassed, nay, rivalled, by oxotics. The elm, maple, bass, oak, walnut, chestnut, plane, &c. abound throughout the northern states, and are as noble trees as any country can boast of. But I will let our indigenous trees, if I do not tire your own, or your reader's patience, form the subject of some future chapter. SOUTH-HILL.

Cortlandville, June 2, 1838.

WOOL.

MR. TUCKER—I have rarely been more gratified with any articles that have appeared in the Genesee Farmer, than with those from your correspondent L. A. M. He appears to not only have taken the right ground with regard to the treatment of sheep, protection, shearing, &c. but he has ventured to expose the slovenly, not to say dishonest way, in which so much of the wool grown by farmers is put up for sale. The evil had become a serious one, increasing yearly as our flocks increase; and operating with injurious effect on the prices of our wool, and destroying the confidence which can only be ground of fair business transactions of any nature. His exposition of the maxim that '*honesty is the best policy*,' exemplified in the putting up and sale of his large clip of wool, and enforced as it is by the valuable letter from Mr. Lawrence of Boston, one of the most extensive purchasers of wool in the United States, it is to be hoped will do much towards the correcting the present injudicious system.

The facts stated by Mr. Lawrence, that the average loss in scouring on American wool is 34½ per cent; the best Saxony wools 16 per cent; Spanish wools 10 per cent; and South Wales Merino wool only 30 per cent, should induce farmers to consider well the cause of this difference, before they complain of the inequality of prices between our and foreign wools. The Saxon or German fleeces are washed in the usual manner, and then trimmed before packing, or in other words all the dirt, *taglocks*, and coarser skirts of the fleece are all taken off. In addition to this, Spanish wool is scoured in soap, which renders it much the cleanest wool in the market. Our wool on the contrary, as our farmers well know, is scantily washed, without soap in most cases, and sheared and packed in the manner so truly described by L. A. M. Though my dealings in wool, and my experience in raising sheep are on a very small scale when compared with those of your correspondent, yet I can add my testimony to the general correctness of his remarks, and the profit as well as propriety of adopting a better system of putting up wool. No farmer need suppose that if he trims his fleeces closely, the wool so taken off is lost. If his flock is of good quality, the skirts will make better ordinary flannels, than can be purchased at the shops; and if not wanted for this use, they can be converted into carpets, &c. and the better price he will obtain for that sold, will in most cases amply compensate for the part taken off and reserved for such purposes. I am convinced we do not pay attention enough to the cleaning of the wool by thorough washing, and that negligence or unfairness to an unpardonable extent is practiced in packing; and if the papers of L. A. M. shall, as I think they must, tend to remedy these evils, by increasing the character and quality of American wools, they will put thousands of dollars into the pockets of our wool growers annually.

Onondaga, May 1838. M.

Black Leg or Hoof-Ail.

FRIEND TUCKER—Having read, and profited much by the experience of your many and valuable correspondents, I would submit to your disposal a *little of my experience*. About thirty years since, (if I mistake not,) horned cattle were very much affected by a distemper called "black leg," or in other words, many cattle were lost by freezing their hinder legs nearly to the knee, which would turn black, and they were about sure to die. Being pretty well satisfied that it was brought on by the *spur, or smut* of the hay, I conceived the idea of trying the experiment of making a brine of pepper, salt and nitre, (salt petre); I selected one of my calves, and feeding all with the same kind of hay precisely, I sprinkled with the brine that which was given to all, except the one I had selected for the experiment, to which the hay was fed clear. About the middle of the winter, I discovered the feet of this one to be frozen nearly to his knees, and *he* died. The others *wintered* well, and came out "as sleek as *moles*."

To satisfy myself further upon this subject, I took two healthy pigs and fed them with the *smut* of rye, which I took the pains to separate for the purpose. They both died—but before their death, the hinder legs of both literally *rotted off*.

I have used the brine since, and have not had a single case of this kind of *hoof-ail*.

The brine used to cure *hams* usually contains about a sufficient quantum of nitre.

Yours, &c. S. HOXIE.

Leonardsville, Madison Co., 5th mo., 1838.

A FEW FACTS

In relation to Hoof-Ail, Ergot and Freezing of the Feet.

MR. TUCKER—My farm is, so far as relates to cultivating grass, a new one—none of my meadows having been in grass more than two years. Still there is a little June grass, and as every where else in this grass, some ergot. We have fed our cattle, sheep and horses at four different barns on this hay. At two of the barns not a case of hoof-ail has occurred. One of these was filled with clover; the other was filled with mixed hay, with a full equal share of June grass, and of course ergot. Another barn was filled with hay indiscriminately taken from the principal meadows, to the extent of 45 to 50 tons. At this barn four cases of hoof-ail occurred; at another, and the last to be mentioned barn, there was not a ton of hay fed or which could be got at to be fed until after the middle of February. At this barn, where corn stalks and oat straw only were fed, if we except the chaff at threshing 400 bushels of wheat, there were three cases of the disease. All the cattle became diseased before the middle of February.

The first case of disease was a beautiful two year old bull, early in October. The second was a four months old calf, in November, and all the others except one in the month of December. Several other cattle were kept at each of the barns which did not suffer from the disease. Though there was ergot in the hay, there was not a quarter so much as in the stacks and barns on alluvial lands along the Genesee river; and yet it is not here known that a diseased hoof has been found on these lands.

My cattle had an abundant bed of straw, and were well sheltered from the severity of the winter, or rather autumn storms, as they could well be without stabling.

I confess myself in the dark altogether as to the cause of the disease, when I see cattle which had none or almost no hay fed them, die of the disease, and others fed on hay all the winter free from disease. Half my cows have had the disease. Only one has died. One has lost off all the hoofs on the hind feet, but as she is vigorous I will wait and see how she will get along. The others, except the calves, have lost none of their hoofs. One calf has died, one has lost a foot, and another the hoofs on one foot; the other cattle, old and young, have recovered, though I think there is a less firm and easy step in the cattle which have been diseased than in the sound ones.

As far as I am able to judge, from almost daily exami-

nation of the feet, none of them have come off unless they have been first frozen, and of the others I have no thought that any were frozen.

My horses and sheep have lived on the same hay, and done as well as usual. W. C. D.

June 6, 1838.

Dandelion for Salad.

Mr. Tucker—I have lately found that the leaves of the Dandelion, (Leontodon Taraxacum,) afford an excellent substitute for lettuce in the spring as a salad. It has a pleasant bitter taste, not unlike that of lettuce, but the leaves are not quite so tender. And besides its agreeable taste, its medical virtues effect a salutary operation upon the system in removing visceral obstructions, in affections of the liver, the kidneys, and the spleen, and in dropsical and hypochondriacal complaints. Our fields are covered with it in the spring, very early, and afford the earliest and cheapest salad that can be procured. E. W.

From the Farmers' Cabinet.

Stir the Earth Deep.

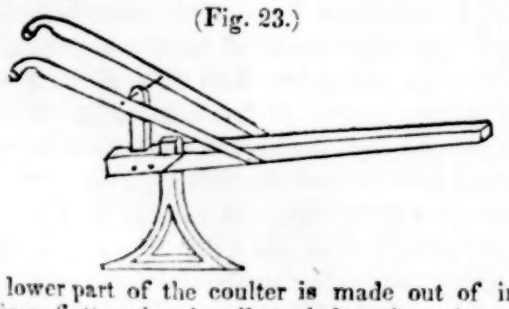
Deep ploughing has been much recommended and but little practised; the reasons for which I suppose are, that proper implements for that purpose are rarely possessed by our farmers, and few choose to incur much expense to supply themselves with suitable utensils when they are not fully convinced that a profit will arise from their use. Having met with the following simple and apparently efficient plough coulter, as it is called, in the Farmers' Register, with a recommendation subjoined, from one of the most intelligent farmers in Virginia, I beg of you to have a wood cut made of it, and publish the description and use of it in your very useful and interesting little work the Farmers' Cabinet. I have no doubt but any of our enterprising farmers, will at once see the importance of bringing it into use, on our stiff soils, to loosen up the earth for three or four inches deeper than our common ploughs go, without bringing the earth from below on to, or mixing it with the surface soil. One horse attached to it, and walking in the furrow after the common ploughman, will effect all that is required. This process of stirring the earth to a greater depth than is usual in common ploughing will, in time of much wet, suffer the superabundant moisture to sink away, and not injure the plants by diluting their food too much; and in time of drouth the fibres of the roots will penetrate to a greater depth in search of their appropriate nutriment. This method of loosening the earth to a greater depth than is usual, is like all those good old rules that work equally well both ways; *wet* or *dry*.

"Plough deep while sluggards sleep,
And you shall have corn, to sell and to keep." E.

Plan and description of an excellent Coulter.

A very brief description will suffice for the coulter, the original contriver of which I do not know; for I met with it about two years ago, on board the Rappahannock steam boat, in possession of a gentleman who could give me no other account of it, than that he procured it from the late Mr. George Banks of Stafford county. I was so struck with its manifest superiority to any coulter I had seen before, that I immediately made a sketch of it; had one made as soon as I could, and have been using them ever since, with a decided preference to all others. None, of which I have any knowledge, are superior to it, in any one respect, while this is superior to them all in two important particulars; you may wear out both points, by reversing them before you send it to the blacksmith; and the point which works behind, causes the coulter to run much more steadily. A single horse will draw it easily in most of our lands, after they have been well broken up with the plough; while four, even of our miserable half-starved Virginia oxen, will break or tear up roots by it, as thick as a man's wrist with no more "geeing" and "hawing" than they require to drag a load of wood to their master's door, or to any other coulter, that I have ever seen tried.

(Fig. 23.)



The lower part of the coulter is made out of inch-square iron, flattened and well steeled at the points, and is twenty-two inches long.

The upright part is of bar-iron two and a half or three inches wide, by a half inch or five-eights thick, and should be seventeen or eighteen inches high from top to bottom, and left square both on the front and hinder edge.

A half inch bolt will suffice to fasten it in the mortice through the beam, which should be at least four by three inches at that part. A band of round, half inch iron, should also be fixed on that part of the beam, so as to rest against the front edge of the coulter above and its back edge below, which will keep it firmly fixed in the mortice.

If this drawing, with my description of it should contribute only half as much as I hope it will, to the benefit of our agricultural brethren, it will be deemed an ample reward, to the end of life, by their friend and yours.

James M. Garnett.

From the "Transactions of the Essex Agricultural Society."

Farm Reports.

To the Committee on Farms of the Agricultural Society, in the county of Essex.

Gentlemen:—The farm that I offer for premium, contains 108½ acres. The soil is hard and rocky, and more particularly adapted to the growth of hay than of grain, as you will perceive by our crops. I this season mowed 35 acres, sowed about 11 acres with oats, and planted about 5 acres; the remainder in pasturing. I cut, the present season, as near as I could estimate, from 70 to 75 tons of hay on the home farm, and about 4 tons of meadow hay away from home. I sowed 5 acres of oats on a piece of pasture land, which was last year planted with corn, with no other manure than a little compost in the hill, and raised 30 bushels to the acre, making 150 bushels. Another piece, containing 3½ acres, raised 30 bushels to the acre, making 100 bushels. Another piece, containing 2½ acres, (that was last year well manured and planted with potatoes,) in consequence of excessive wet after they were sowed, was considerably injured, but I think we shall have 40 bushels to the acre, (although they are not all threshed,) which will make 100 bushels; making in the whole 350 bushels. I usually sow three bushels to the acre. I planted 3 acres and 30 rods of pasture land with corn; ploughed about two-thirds of it in September, the remainder in April; carted on 17 cart loads of barn manure to the acre; then ploughed about one half of that which was ploughed first; harrowed it, planted it May 24, three feet one way and two the other with Canada corn, with 4 bushels of ashes and 2 bushels plaster Paris in the hill to the acre; hoed it three times; some part of it was considerably injured by the worms. It yielded 308 bushels of ears of sound corn; two bushels of which I shelled, which made one bushel and four quarts of corn, which makes 54 bushels to the acre. I planted from 8 to 10 kernels in a hill; although I think three or four is enough to grow in a hill. I could see no difference between that which was ploughed in the fall, ploughed in the spring, or cross ploughed. I planted one acre and 129 rods of potatoes in one piece; the sward was turned in about the 20th of April; carted on 30 cart loads of stable and compost manure to the acre; planted them the last of May and first of June, planted them three feet one way and two feet the other. They were considerably injured by the drouth, and were not as large as our potatoes usually are. Had 600 bushels, which makes 332 bushels to the acre. I raised 100 bushels on another piece, making in the whole 700 bushels. I picked from the trees 175 bushels of winter apples, besides 100 bushels of sauce apples, which dropped from the trees; the refuse apples I used mostly for fattening beef and pork. Our dairy has not been as large as usual, (as I sold several cows in the spring.) It has consisted only of 3 cows and 4 two year old heifers, from which the calves were taken nearly as follows: 2 the 1st of May, 1 the 20th of May, 3 the 5th of June, and the other the 15th of August;—made previous to the 15th of November, 615 lbs. of butter and 400 lbs. of cheese, besides using as much as one cow's milk in the family. As to the growth of my stock, I can state nothing definite, as I have no regular system by which to be governed, but manage as circumstances seem to require. I usually make but little pork, as I sell most of my surplus grain and potatoes. The whole amount of labor employed from the first of April to the first of November, including all my teaming and marketing (which is principally to Lowell,) haying and threshing my grain, is equal to two hands the 7 months, and a third 4 months. Their wages amounted to $240.

As entering my farm for premium was entirely unpremeditated, therefore I cannot give so definite a statement, in any respect, as I might otherwise have done.

In compliance with your request, I also give a brief statement of the management of my farm and the comparative increase of crops for a few previous years. I usually mow my fields from four to six years; then plough and manure them; plant one year, the second sow with grain and hay seed,—although I have recently practiced top dressing with compost manure with very good success. As most of my pastures are suitable for cultivation, I occasionally plough them, plant one year with corn, manure in the hill with compost manure, and the second year sow with grain and hay seed, which improves the pasture. I have purchased, since the spring of 1829, on an average, from 12 to 15 cords of manure per year. I have also used a few tons of plaster Paris with very good success. I also last year used 100 bushels of ashes. As to compost manure, we make as much as circumstances will admit of.

I have about 5 acres of meadow land, which formerly produced but very little hay, and that of an inferior quality. The mud in the deepest part was about three feet deep, and gradually decreased on every side to the upland. I commenced ditching it in the Autumn of 1828, and did but little more until the Autumn of 1832, when I carted on the contents of a barn cellar I had been digging;—sowed on hay seed, and the next year it produced a good burden of English hay. Since that time, I think it has produced from 2 to 3 tons to the acre. I cannot state precisely the expense of draining said meadow, but think it will amount to about $30 per acre. I have a few acres of low land adjoining said meadow, which formerly produced but very little, and by top dressing, now produce a large burden of good hay. I think that my hay has increased at least one half within the last nine years. I have usually employed two hands during the season, but for the last two years have had some additional help at certain seasons of the year.

My corn has produced, I presume, beyond your expectation. I find it is the case with others in our neighborhood, who have planted the same kind of corn, that it has proved beyond their expectations previous to gathering it. The corn that you saw in my field was not so good as it would average, as the middle of the field was much the largest. Joseph Howe.

Methuen, Nov. 29, 1837.

Pruning Fruit Trees.

It is rather difficult to give upon paper very explicit directions in this department of culture, as many varieties of Fruit Trees require different management: Peaches, cherries, and plums are always in the greatest vigor when they are the least maimed by the knife, for when these trees have large amputations, they are very subject to gum, and decay; so that it is certainly the most prudent method carefully to rub off all useless buds, when they are first produced, and pinch others were new shoots are wanted to supply vacancies. Fruit Trees in this latitude should not be prunned in the fall or winter, or before the sap is in motion, as they are at those times exceedingly apt to crack or canker. The proper season for pruning we consider, is immediately upon the swelling of the buds, or expanding of the leaves, as at this time the sap being in vigorous motion, the wounds soon heal over. Every limb should be cut *close* to the main stem, and if sawed off, should be then finished smoothly with a sharp knife. If the limb is large, a composition of red ochre and tar should be spread upon the end to keep out moisture, &c., or the composition hereafter named. From the strong and vigorous growth of Fruit Trees in our country, close pruning is less necessary here than in England, from whence we have derived most of our instructions; excessive pruning with us is apt to generate suckers from the limbs. Judicious pruning, however, will promote health and early fruitfulness. Trees differing, as they do in form, require very different treatment in pruning. Coxe, of New Jersey, says, "those who can conveniently do it, will find a benefit from forming the heads of their trees in the Nursery, the year before they remove them—when transplanted, they will thrive more rapidly from not having been pruned at the time of removal."

Every limb which crosses another should be taken off. In pruning apple and pear trees, the external branches should be every where rendered thin and pervious to the sun.—*Manning's "Book of Fruits."*

Diseases, Injurious Insects, &c.

The injuries and diseases to which Fruit Trees are subject, are often difficult to be accounted for, and the various methods devised for their correction so abundant, that the space allotted in this small treatise will allow us to select but a few of those which we think on the whole best.

The following remedy is found to be the most effective in preventing further decay, and restoring a healthy vegetation, answering a double purpose, being also an excellent grafting composition. It is given thus:—

Take one pound of pitch, one pound of rosin, half pound beeswax, quarter pound lard, quarter pound turpentine, melted and mixed; spread evenly and thin, with a brush upon soft kentish cap paper or strips of cotton cloth. This compound will resist the force of washing rains, frost, drying winds, and the influence of a changeable atmosphere.

Now prepare the tree properly for its application, by cutting away all the dead, decayed, and injured parts, till you come to sound wood, leaving the surface very smooth, and rounding off the edges of the bark with a sharp drawing knife; then lay the plaster over the part cut

away. In hollows of trees, you must scoop out all the rotten, loose, and dead parts, till you come to the sound wood, and then apply the composition as above. With regard to the destruction of blighting insects, the practice of burning weeds, wet straw, hay, &c. to the windward of trees, particularly when sulphur is added, is probably as good a method as can be adopted. Wood ashes sprinkled upon the leaves of pear trees, infested by the slimy slug, particularly if it is done during wet and drizzly weather, we have found very effective in destroying them. The canker which destroys many of our fruit trees, is said by Scotch gardeners, to be owing to the stintiness that takes place in the trees from a bad sub soil. With regard to the insects that infest trees, we consider the *borer* the most destructive. The Philadelphia Horticultural Society awarded to a Mr. Snyder, the premium for the best assortment of fruits exhibited at their show. This man had been in the habit of placing ashes of anthracite coal about the roots of his fruit trees, and to this circumstance he attributed their preservation from the attacks of insects. We know not, however, a more effectual way of destroying this insidious insect, than by cutting them out.—*Ib.*

From the Farmer & Gardener

POUDRETTE.

Having observed in the Genesee Farmer some inquiries with regard to the manufactory of the above article, established in the city of New-York, by Mr. D. K. Minor, editor of the New-York Farmer, we take pleasure in publishing the following letter, which we received some days since from that gentleman, by which the progress he has made will be shown, and the inquiries in the Genesee Farmer answered.

We have also been favored with a barrel of the *Poudrette*, which we shall give a fair trial, on some drilled turneps without other manure, and report progress in due time.

The *basis*,—*human ordure*,—of this manure, has long been used in this vicinity by the market gardeners, with the happiest fertilizing effects, and we doubt not, its virtues under its new cognomen and chemical form, will be equally beneficial. In France, the Poudrette has been used as a manure for years, and won golden opinions for itself. We sincerely hope the enterprising editor of the New-York Farmer, may meet with that encouragement which his laudable zeal in behalf of the husbandry of the country so eminently entitle him.

NEW-YORK, May 14th, 1838.

To E. P. ROBERTS, Esq.,

Editor of the Farmer & Gardener:—

DEAR SIR—You have probably noticed, in the New-York Farmer, that I have been engaged for some time past, in introducing an improvement in "*city economy*," by which the contents of privies, an article of great value to agriculture, now thrown away, and worse than that, as they are *deposited in the rivers around the city*, instead of being, as I trust hereafter they are to be, converted into an inoffensive and portable manure.

The subject was brought to my attention, last year, by a French gentleman, who is familiar with the process in his native country, and who is now engaged with me in the operation here.

We have had many prejudices to combat on account of the nature of the business, and to encounter, in consequence of the general derangement of business, which have delayed our operations; yet we are now preparing about 60 bushels of Poudrette daily, and have a prospect of doing much more after a short time, when other business shall have again resumed its accustomed activity; so that a few additional shares of our stock may be paid for, which will enable us to increase the number of teams required to "remove the deposits." Of the value of Poudrette as a *manure* no person of my acquaintance, familiar with its preparation, entertains a doubt; yet there are few persons in this country who are sufficiently acquainted with its use to appreciate duly the benefits which will surely result from the labors of those who shall introduce a mode of preparation by which the immense amount of valuable material now thrown into our rivers, and of course a *nuisance* to all classes of community, shall be converted into an inoffensive, portable, and highly valuable manure. The process of preparation in my opinion does not materially, if at all, deteriorate its value, as I will satisfy you when you will visit our works.

That you may be better acquainted with the article, and have an opportunity to test its value, as well as its inoffensive character and portability, I send you a barrel, and shall be much obliged by your using it for any kind of vegetables, or grain, or on grass, as may be convenient for you, and noting its effects as compared with other manures. I cannot give practical instruction as to the best mode of application, but will observe, that I am using it in my garden for experimental purposes, by putting some in the hill, some in drills, and spreading some broad cast, and raking it in. I estimate its strength or value in proportion of one bushel of Poudrette, to eight or ten bushels of barn yard, or stable manure, and equal, bushel for bushel, to bone dust. We have not yet, for want of means to extend our works, been able to furnish a bushel to any person except those who have taken a share, or shares of our stock, although numerous applications have been made for it in small and large quantities, as well by gentlemen in neighboring States, as by those in this vicinity. To those who pay in $100, or take a share, we furnish *two hundred* bushels of Poudrette as their annual dividend, within three and six months from the time of payment, which is equivalent to sixty per cent, on their instalment,, as we can receive thirty cents at the works for every bushel we can make.

We hope soon to be able to extend our works so as to furnish Poudrette to those who wish it, and I trust important benefits will result to agriculture from the introduction of this new source of improvement—*new*, at least, in its application to any considerable extent in *this* country.

The usual enquiry is "*how*" and "*how much*" shall we use—not "*is it useful?*" There are, however, many whose nerves are too sensitive to "think of using it," although they have little objection to a slice from the rich sides, or the delicate ham, of a fat porker—and seldom turn aside when a well stuffed and roasted *duck*, who in life delighted to seek food in all sorts of places, is smoking before them. *Prejudice*, however, will give place to reason, where important facts shall have opened her eyes. The result is *certain success.*

I hope to hear from the effects of the barrel sent you on the 11th inst. on board of the Schooner Amanda, Bedell, master.

I am, sir, very respectfully, your ob't servant,

D. K. MINOR.

CORN.

As the corn is now fit for working in most places, and will soon be in all, we most earnestly recommend to all not to let the grass get the start of them. By timely attention to its eradication at the *proper* period, one half the labor of cultivation may be saved, and saved too, with a certainty of adding greatly to the value of the crop of corn; for unless the ground be kept clean and well stirred, no matter how fertile may be the soil, or howsoever well it may have been manured, it will not yield generously. There is no crop so easily affected by cleanly or slovenly culture; nor are there any which rewards the first, or punishes the latter treatment with more signal discrimination. Corn, weeds and grass, are, from their very nature, rival enemies—they cannot all thrive together; and he who wishes to succeed with his crop of *corn*, must take up the resolution to go to work from the start, and never cease working until it is laid by. We recollect when a boy to have heard an old gentleman, who was distinguished for his fine crops of corn, asked to explain the manner by which he so universally succeeded. His answer was laconic, but unfolded the whole mystery of the culture. "I keep my corn clean." "But then, sir, how do you manage it?" "I keep my corn clean," was the reply, and so emphatically given, that all further questions were suppressed; for by this time the inquirer had learned, that in the short and pithy sentence then just announced, he had a *treatise* on the culture of corn, as full of wisdom as though it comprised an octavo volume. —*Farmer & Gardener.*

From Evans & Ruffy's Farmers' Journal.

On preparing Seed Wheat.

SIR—I last year informed you, that I had tried the steep for wheat recommended by Sir John Sinclair, but not with complete success: yet, nevertheless, from what I then saw, I determined to give it another trial. From the observations I made at that time, I had reason to think that the quantity of sulphate of copper set down in Sir John's recipe, was not sufficient, and that a much larger portion would not be injurious to the wheat; but not wishing to run any risk, I determined to ascertain this previous to the arrival of the season for sowing. With this view I dissolved 1lb. of sulphate in four quarts of water; I procured some seed wheat that was very much smutted; one part of this I steeped in the solution twelve, and the other twenty-four hours; a quantity of each was then sown; it came up well, and when it arrived at maturity this year, not a single grain of smut was to be found on it. Observing that so large a quantity did not affect the germination of the plant, I caused four pounds of the sulphate to be dissolved in a quantity of boiling water, to which, when a complete solution was effected, as much cold water was added as, when put into a proper vessel, would cover a bag of wheat six or eight inches; the grain was suffered to remain therein about one hour, and then quick lime was made use of as usual; when three or four bags had passed through the mixture, some more water, and 1 lb. of the sulphate were added, and so in continuation for every three or four bags until the water became foul, when a fresh portion was prepared as in the first instance. The result has been, a crop entirely free from smut. The extent of land sown was nearly forty acres, and it is the first time the same land has been free from this terrible disease for some years, although the salt steep has been heretofore universally resorted to. The cost of this preparation is a mere trifle, as the sulphate was charged to me only 8d. per pound. Having once succeeded, I mean to pursue the same course, and should I live so long, I will repeat to you the result, be it favorable or otherwise; for it is not by one or two successful experiments, at least in this case, we can determine upon the value of the method pursued.

I remain your's, respectfully, NEMO.

Birmingham, Sept. 2, 1837.

From Loudon's Magazine.

On the Swarming of Bees.

By JOHN WIGHTON, *Gardener to Lord Stafford, Cossey Hall Gardens, Norfolk.*

Much has been said and written, of late years, on the means of preventing the swarming of bees; but all the various plans suggested have, I believe, proved ineffectual. I have had the care of bees, on what is termed the "humane system," for eight years; but all my experiments to prevent their swarming have failed. Want of room, and great heat in the hive, are held by some to be the causes of swarming. Mr. Nutt of Lincolnshire attempted to obviate these causes, by boxes of a peculiar construction, provided with tubes of tin, made moveable for the purposes of ventilation. Mine are boxes of his making: but I never could prevent the bees from swarming, by allowing them plenty of room. Ventilation is not easily accomplished; for the bees are sure to seal up the smallest aperture.

Heat and want of room may induce swarming, if there be more than one mother-bee in the hive; but not otherwise. In the former case, the mother-bees will always fight, till one is compelled to quit the hive. The mother, or queen bee, who retires will always be followed by a number of others; and this constitutes a swarm. It is, in fact, a provision of nature for the multiplication of the species. Hence, there is no other way to prevent swarming, but the destruction of the rival queen. This cannot be done without much trouble, and considerable injury to the bees, however easy it may appear to some, who, probably, have never tried the experiment. The worst part is, that the process must be repeated; for, in the breeding season, there are mother-bees in different stages of existence, and some in the larva state, which cannot be detected.

Another suggestion has been made, to destroy the queen-bee out of a swarm, and then replace the bees in the hive. But here the same inconvenience recurs; for, if there should remain another superfluous queen in the hive, they would speedily swarm again, as I have found by experience. Unpleasant as it is to have a hive weakened by swarming, there is, I fear, no possibility of preventing it, while there remains more than one mother-bee in the hive. However wide a space might be asssigned to them, the mother bees will always attack one another. If two are imprisoned together, they will fight. Apiarians have said many fine things about the queen-bee and her royal government; but the simple truth is, that she is the parent, or mother, of the young progeny. Of this I had myself some doubt, till I observed the mother-bee laying an egg in several of the cells in the month of June last. This, therefore, being a provision of nature to continue the species, there can be no successful scheme to prevent swarming, and to attempt it is mere folly.

Cossey Hall Gardens, Jan. 20, 1838.

To improve Grass Land without Manure.

We are informed that a farmer improved his grass land in the following manner. About the first of July, when the grass had attained a good growth, he ploughed in the grass, which would have produced about a ton of hay to the acre, ploughing it about 4 inches deep and turning it completely over smooth and even, as the ground was very even, level, and free from stones. Then he rolled it to make the turfs lay close, then harrowed it several times to make the soil mellow. Then sowed herd's grass, clover and foul meadow; the last was sown by mistake for red top. The herd's grass and foul meadow have grown very stout, and the clover has grown fine and thick at the bottom. This produced the first and second years, (1836-7,) two tons to the acre. The general produce was not more than half a ton before ploughed. This soil is too wet for tillage, excepting for ploughing very late and ridging. —*Yankee Farmer.*

Swellings.

To scatter swellings on horses or other cattle, take two quarts of proof whiskey or other proof spirits, warm it over coals, but not to blaze—dissolve in it a pint of soft soap—when cool, put it in a bottle and add one ounce of camphor. When dissolved, it will form the liquid opodeldoc, and is then ready for application; forming a cheap and useful remedy. When the swelling is on the leg, or any part that will receive a bandage, such bandage should be applied, and wet with the opodeldoc.

Products and Profits of land in Kent County, Del.

Having often heard from others, of the great profit made by our neighbor, Jonathan Jenkins of Camden, from the cultivation of a few acres of land, which a short time since was of inferior quality; I finally determined to ascertain from himself the truth of the statement above alluded to. He informed me that he began to improve the soil of this small tract of land, containing only thirty-eight acres. It was very poor—more so than most of the lands in the neighborhood of Camden, and not better than much which is now suffered to lie waste in our country. That from the very beginning it paid him a good profit, for the money expended in the purchase, and all the manure and labor bestowed upon it, although some of it, in consequence of its immediate vicinity to Camden, cost him sixty-five dollars per acre. That his crops kept every year increasing in quantity, quality, and value, until he was induced to keep an account of them, and of the sums realized from the sales of his various crops, as well as the expence of culture. The following is a statement made in his own hand writing, and handed to me with the liberty of making it public for the encouragement of others, who own light worn-out lands in our state.

Products of Jonathan Jenkins' model farm containing thirty-eight acres, and divided into five fields, for the year 1837.

250 bushels oats, at 50 cents,	$125 00
150 bushels winter wheat, red bearded, at $2,	300 00
46 bushels spring wheat at $3,	138 00
325 bushels Pennsylvania yellow flint corn, at $1,	325 00
35 tons Clover Hay at $12,	420 00
15 tons wheat and oat straw, got out with wheat threshing machine, worth per ton $8,	120 00
Corn stalks, top and blade fodder, and cut off by the ground and saved in good order, worth say	75 00
140 bushels Irish potatoes at 50 cts	70 00
15 bushels sweet potatoes at 60 cts	9 00
40 bushels turneps at 15 cts	6 00
Pasturage for 4 cows, 8 months at $2 per month,	64 00
Profit or advantage from pasture in fattening 1000 lbs. of beef, over and above the pasture of cows as stated,	40 00
	$1692 00
Deduct for expenses of cultivation and saving crops allowance, say	320 00
Nett profit,	$1372 00

He says that some persons may probably think his estimate of prices too high; but that he has always sold most of the produce for the sum there given, and expects to dispose of the remainder at the rates there set down; and at all events, making every allowance for the excess in the estimate of the value of this little farm, these thirty-eight acres were worth to him the last year *a sum equivalent to the interest on twenty thousand dollars.—Del. Register.*

Peach Trees.

The following communication from Col. Smith, Secretary of the Agricultural Society, is worthy of consideration. The plan recommended is simple, and no doubt efficacious; and if generally adopted in sections where coal ashes may be easily obtained, the best results may be anticipated. The great value of coal ashes has been almost entirely overlooked.

About this time last year, I sent to the editor of the Germantown Telegraph, a communication, which was published over the signature of PENN, recommending the use of COAL ASHES AS A MANURE FOR PEACH TREES. Another year has rolled around, and I still have no reason to doubt their efficacy. The result of my observation has confirmed the opinion I advanced in my communication of last year. I have found very few worms, although many of my trees are in a garden, and the earth round about them, is more or less mixed with the ashes in its cultivation. Most of those I found were above the ground, and their presence was indicated by an oozing of gum, accompanied with a woody-borings thrown out by the worm. By looking for these, their presence is easily indicated. My trees during the last year have made a great quantity of wood, and have been remarkably healthy. They have this spring an appearance of vigor, that seems to justify me in expecting a large crop. My confidence in the advantage of the use of coal ashes, is now fully established, both for peach, apple, plum, and apricot trees. I open a hole around the root extending to about the distance of a foot from the stem; then after having carefully examined to ascertain that there are no worms, I fill up the hole with ashes, and raise it about four or six inches above the level of the adjacent earth. I find the ashes after being wet adhere very closely to the stem, and hold the tree firmly in its position. The ley therefrom, whether it proceeds from the lignious or mineral ashes, (for there are usually both in the coal ashes, to say nothing of the theory that mineral coal is a vegetable deposit,) certainly acts as a powerful promoter of the rapid growth and vigorous and healthful appearance of the tree; and in bearing seasons, insures an abundant crop of fruit, and that too upon a soil in which the cultivation of the peach tree has been almost abandoned for thirty years past. This delicious fruit, can now I think be cultivated in the county of Philadelphia, with complete success, if care is taken to have the trees examined twice in the fall, between the 1st of September and December, and once in the spring, a labor which is soon performed, as the presence of a worm is so easily detected when ashes are used, and the worms are seldom found below the surface of the ashes.—*Farmers' Cabinet.*

From the Farmers' Cabinet.

Advice of a Farmer to his Boys.

Come boys, let us see if we can't farm a little better this season than we did last. I think we can if we make an effort; and if every succeeding year we outstrip the preceding one, I think in a few years you will be able to set up for yourselves. We have already sown our grass seed this spring thicker than heretofore, which there is reason to believe will amply repay us for the additional seed, as we have heretofore always had more or less bald places in our grass fields, or had them filled up with weeds. We have some seed oats which weigh ten or twelve pounds a bushel more than the common kind we have usually sown; this cannot fail to be an advantage of at least 25 per cent over the light stuff we have had in former years, and if it is found to become lighter by being re-sowed, we must change our seed again at a future time. As for Indian corn, the "Dutton," of which we have plenty for seed, I think will answer our purpose the best of any kind I have seen, if we put it in handsomely and give the strictest attention to the dressing of it with the cultivator; let us give it a couple of extra dressings during the summer, and keep the ground as mellow as an ash-heap; this is the only way I know of to make a good crop of Indian corn. It suffers more from neglect than any other crop we cultivate; but stop—let us collect our ashes together and put a handful of it, with as much plaster Paris, on each hill as soon as the corn is fully up; this pays well for expense and trouble. But I am getting wrong end foremost with my plan; be sure when you go to the city next week, to buy a pound of salt-petre to make a steep for the corn before it is planted; this is said to be an excellent plan, as the corn comes up much more vigorously after being soaked in saltpetre and is sooner out of the way of the birds and grubs, which is a matter of great importance. Well, we had forty bushels to the acre last year; now can we go fifty or sixty this, if the season is favorable, and we pay strict attention to it? let us try for it any how; and one thing I am certain of, that our success will be in proportion to our exertions, other things being equal. We must increase our potato crop, and raise an acre of sugar beet, and the same quantity of ruta-baga for winter food for our cattle and sheep; the attention to these root crops is light work, and I think need not interfere with our other business; besides, I intend to buy neighbor Jones' old still, as he has quit making whiskey with it, since his two fine promising boys have gone to destruction by the use of that vile article. I think he will sell it cheap, as it sickens his heart to think of a still since the prostration of all his prospects for the advancement of his once fine boys. We can fix this up so as to steam our roots and grain for the hogs and cattle, and I have a great notion to try it on cut corn stalks and hay, for it is said they go much further, and feed better by being cut and steamed. The miller's toll may also be saved by steaming the grain we feed, instead of having it ground. If all the stills in the country were used for preparing food for animals, instead of making poison for men, it would save at least ten millions of dollars annually, and clear out most of our poor houses and jails, and prevent many a parent from going to the grave with a broken heart. Let us turn to to-morrow morning right early, and drive on our work vigorously during the season and with the blessing of Providence on our united exertions we shall find ourselves blessed in basket and in store, even beyond our deserts. ABRAM.

Agricultural Implements.

We mention, for the benefit of our subscribers in Virginia and the neighboring states, that an extensive manufactory of agricultural implements has been sometime in operation at Richmond, Va., under the direction of Jabez Parker; and that the implements furnished from his shop, as threshing machines, straw cutters and corn shellers, are, according to the Richmond Enquirer, particularly excellent. Labor-saving machines, like those above named, as well as cultivators, drill barrows, horse rakes, &c. add much to the profits of farm labor, and are becoming almost indispensable in spirited and profitable husbandry.—*Cultivator.*

OIL FROM VEGETABLES.—A discovery has been made in England, by which oil may be obtained in greater abundance from the seeds of vegetables by applying to them diluted muriatic acid.

"Work it Right."

AS there is but a poor prospect of a corn crop, every Farmer who 'works it right' will cultivate some more certain crop that will answer as a substitute.

PEAS will still succeed if sown without delay; the early Canada peas are the best.

CARROTS are excellent food for stock, and it is not yet too late to sow them. On deep rich light soil, with good cultivation, they will yield fifteen hundred bushels to the acre.

SUGAR BEETS AND MANGLE WURTZEL—these may also still be sown, and if the soil and season be favorable, an abundant crop may be obtained. The seed should be well soaked before sowing—and procured from the ROCHESTER SEED STORE, where all the above can be obtained of genuine quality. (June 2) REYNOLDS & BATEHAM.

Root Cultivation.

A LARGE supply of new and genuine Ruta Baga, Mangel Wurtzel, Sugar Beet and Orange Carrot Seed, just received at the Rochester Seed Store.

REYNOLDS & BATEHAM.

Rochester, April 21, 1838.

Drill-Barrows or Planting Machines.

A NEW supply of Robbins' Patent Planting Machines, just received at the Rochester Seed Store.

Also, a number of Merchants' Patent Drill Barrows. [See No. 18, current vol. of the Genesee Farmer.]

May 5. REYNOLDS & BATEHAM.

Early Red-Blazed Seed Corn.

THIS variety of Indian Corn is very productive; the ears are of good size, and by experiments made the past season, it was found to ripen earlier than almost any other variety, not excepting the celebrated Dutton. It is for sale by

May 5 REYNOLDS & BATEHAM.

☞ Many other choice varieties for sale as usual.

Farmers' Books.

NOTICES on the Sugar Beet, containing a description of the culture and preservation of the plant; also explanations of the process of extracting its Sugar. Price 25 cts.

A Manual of the art of making and refining sugar from Beets. Price 75 cents.

Cobb's Manual on the Culture of Silk.
Chaptal's Agricultural Chemistry.
The Complete Farmer, by Fessenden.
Fessenden's American Gardener.
A Guide to Orchardists.
Smith's Treatise on the Honey Bee.
A Treatise on Cattle.
Mason's Farriery.
Barnum's American Farriery.
Vols. 1st and 4th, Genesee Farmer, bound.

For sale by D. HOYT,

Rochester, May 26, 1838. Bookseller, 6 State st.

Siberian or Tartarian Oats.

A GOOD supply of this valuable variety of oats—a genuine article—for sale at the Rochester Seed Store.

The numerous accounts which have been published respecting the qualities oft hese Oats, render any further recommendation entirely superfluous, at least to the readers of the Genesee Farmer.

Dr. Wm. C. Dwight of Moscow, has raised them for several years, and thinks them decidedly preferable to any other variety. He recommends sowing them very thick, (from 3 to 4 bushels to the acre,) as it renders them less liable to lodge. They yield with him from 70 to 80 bushels to the acre.

May 5. REYNOLDS & BATEHAM.

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county, state of New York, a large quantity of Fruit Trees, grafted and innoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.

apr 15-tf

N. B. CASH will be paid for a few thousand two years old APPLE TREES

Monroe Horticultural Garden & Nurseries, Greece, Monroe Co., N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries, Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.